UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,873	06/14/2006	Masaki Iwasaki	292122US0PCT	6546

22850 7590 08/06/2009

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
THAKUR, VIREN A	
ART UNIT	PAPER NUMBER
1794	

NOTIFICATION DATE	DELIVERY MODE
08/06/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No.	Applicant(s)	
	10/582,873	IWASAKI ET AL.	
	Examiner	Art Unit	
	VIREN THAKUR	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5,7 and 8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5,7 and 8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. As a result of the amendment to the claims, the rejection of claims 1, 3-5 and 7-8 under 35 U.S.C. 112, second paragraph, has been withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1,3-5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohishi et al. (US 20030077374 A1) in view of Kuznicki et al. (US 5681569), Ekanayake et al. (US H001628 H), Broz (US 20020197376), Yamamoto et

al. (JP 08-000173) and Inaoka et al. (WO 0239822 A1) for the reasons given in the previous Office Action, mailed January 28, 2009.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohishi et al. (US 20030077374 A1) in view of Kuznicki et al. (US 5681569) Ekanayake et al. (US H001628 H), Broz (US 20020197376), Yamamoto et al. (JP 08-000173) and Inaoka et al. (WO 0239822 A1) as applied to claims 1, 3-5 and 8, above and in further view of Tsai et al. (US 4946701) and Teach Me Tea Cha, for the reasons given in the previous Office Action, mailed January 28, 2009.

Response to Arguments

6. Applicants' arguments filed May 21, 2009 have been carefully considered but are not deemed persuasive.

7. On the bottom of page 6 of the response, applicants urge that the combination of references provide an improved storage stability for non-polymer catechins. Applicants further urge that the primary reference to Ohishi et al. fails to describe enhanced non-polymer catechin stability by use of a sweetener consisting essentially of an artificial sweetener. Applicants provide evidence of this property of an artificial sweetener enhancing non-polymer catechin stability in the Iwasaki declaration filed December 16,

2008. The declaration was considered prior to the Office Action mailed January 28, 2009 and was not deemed persuasive.

It is further noted however, that although the Iwasaki declaration indicates that employing an artificial sweetener alone improves the catechin content over an extended period of time compared to a natural sweetener and an artificial sweetener plus fruit extract, this showing is not commensurate in scope with the claims. Specifically, it is noted that claim 1 recites a range of catechins present at between 0.01 to 1 wt%. Since the declaration shows that there is still a decrease in catechins regardless of the particular sweeteners employed, if 0.01 wt% non-polymer catechins were employed, it is not clear as to whether this particular percentage of catechins would then fall out of the claimed range over an extended period of time. In light of this, claim 1 does not provide any specificity as to whether the particular percentage of catechins is immediately after bottling or is a constant over a period of time or is after a particular duration of storage in the package. If applicants are intending to indicate that the unexpected result is as a result of the exclusion of fruit juice/extract, applicants' claims are not commensurate in scope with this apparent unexpected result, since the claims do not exclude the use of fruit extracts. Although claim 1 recites "a sweetener consisting essentially of an artificial sweetener" it is noted that other ingredients that provide flavor but not necessarily sweetness, such as sour components, like lemon flavoring would still not have been excluded from the claim. Additionally, it is noted that claim 3, for instance even recites that the beverage is a "non-tea-based beverage." As per applicants' disclosure, "non-tea-based, packaged beverages include, for example,

carbonated beverages as soft drinks, beverages with fruit extracts, juices with vegetable extracts, near waters, sports drinks, diet drinks and the like." Therefore, applicants' arguments and the declaration are not commensurate in scope with the claims.

In addition, it is noted that Ohishi et al. teaches in paragraph 0042 that juices from natural substances can be employed as acidulants. Therefore, substances such as lemon juice concentrate would also have inherently modified the pH of the beverage as well. Therefore, it is noted that other components which have can have multiple functions, such as lowering the pH and adding flavor, such as acidic concentrates are not excluded by the claim limitations.

Furthermore, it is noted that applicants' specification appears to indicate that the particular criticality lies in the amount of catechins and the ratio of quinic acid and in the additional additives such as sodium and potassium ions and amount of sweetener employed for achieving the overall effect of reduced bitterness and astringency suitable for long term drinking, and stability of the bitterness and astringency. Nowhere have applicants' disclosed a criticality or relationship between the amount and type of sweetener and the catechin content. On page 5 and 6 of the response, applicants discuss the stability of non-polymer catechins being closely related to color tone and taste. In addition, it is noted that applicants' specification discloses stability of a beverage with respect to bitterness and astringency. Although this might be related to the particular state of the catechins, it is noted that Ohishi et al. would also inherently have provided stability to the catechins since Ohishi et al. also provide "stability" with respect to bitterness and astringency. It is noted that applicants have cited the

reference to Wang et al. "Effects of Heat Processing and Stroage on Flavanols and Sensory Qualities of Green Tea Beverage" (J. Agric. Food Chem. 2000, 48, 4227-32) to show that storage stability of non-polymer catechins is closely related to the stabilities of color tone and taste. It is noted however, that Wang et al. discusses color tone and thus stability and flavor of catechins with respect to heat treatment and not with respect to the use of other sweeteners that affect the amount of catechins present.

Additionally, it is noted that example 2 of the Ohishi reference discloses using 0.154 wt% non-polymer catechins, which falls within applicants' claimed range and the sucralose is present at 0.392 grams per 1000 grams total, which is 0.0392wt%, which also falls within applicants' claimed range. The Iwasaki declaration compares a beverage using only an artificial sweetener, fruit juice extract and artificial sweetener and a natural sweetener such as glucose. It is noted that example 2 of Ohishi et al. does not disclose any fruit juice or natural sweetener and applicants' claims do not exclude other components present in the packaged beverage which result in a "non-tea-based beverage."

Although applicants' inventive examples 1, 3 and 4 are similar in composition to each other with the exception of the sweetener and the fruit extract, it is noted that the declaration fails to provide convincing evidence that the compositions taught by Ohishi et al. such as examples 1, 2 and 6 would also have resulted in a lowered catechin over an extended period of time. For instance, applicants' example 3 discloses using fruit extract and an artificial sweetener. The fruit extract is present at 2%. It is noted however, that example 1 and 6 of the Ohishi et al. reference are using only 1 percent

lemon concentrate: 10 grams / 1000 grams total = 1%. The declaration does not make clear as to the relationship between decreasing amount of fruit juice and catechin content. For instance, if 2% juice extract results in a decrease of 0.03% (versus 0.005%), then would 1% fruit juice result in 0.015% decrease? Is there a direct proportion between the amount of fruit extract and the catechin content? Also, what would be the result if components other than fruit extract were added, such as the coffee extract? In light of the lack of any disclosure regarding the relationship between the particular sweetener, any additional fruit juice (or other flavoring components) and catechin content, the declaration filed December 16, 2008 is still not convincing. Regardless of the Wang et al. reference however, applicants' arguments and the declaration are not persuasive for the reasons given above.

8. Applicants further urge that in light of the breadth of the disclosure of suitable sweeteners taught by Ohishi et al., that there would have been no suggestion that by selection of a sweetener consisting essentially of an artificial sweetener that enhanced storage stability of non-polymer catechins would be realized. Applicants assert that the reference fails to describe enhanced non-polymer catechin stability by the use of a sweetener consisting essentially of an artificial sweetener.

Further in view of the discussion above, it is noted that Ohishi et al. teaches the use of only an artificial sweetener, such as sucralose, as shown in examples 1, 2, and 6. Therefore the art teaches that the use of an artificial sweetener to flavor a non-tea

based packaged beverage and which does not generate an uncomfortable aftertaste, bitterness or astringency has been conventional in the art.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIREN THAKUR whose telephone number is (571)272-6694. The examiner can normally be reached on Monday through Friday from 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steve Weinstein/
Primary Examiner, Art Unit 1794

/V. T./
Examiner, Art Unit 1794